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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,062	03/02/2004	Shingo Nishioka	ASA-1169	9825
7590 04/28/2008 Mattingly, Stanger & Malur, P.C. Suite 370 1800 Diagonal Road Alexandria, VA 22314			EXAMINER LEWIS, ALICIA M	
			ART UNIT 2164	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/790,062

Applicant(s)

NISHIOKA ET AL.

Examiner

Alicia M. Lewis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14 and 15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14 and 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

This office action is responsive to the communication filed January 10, 2008.

Claims 11-13 have been canceled, and claims 14 and 15 have been added. Therefore, claims 14-15 are pending in this application.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Claim 14 recites the limitation "adding the document" in line 24 of the claim. However, it is unclear as to what document is added to the search results candidates holding module. The claim previously recites comparing a number of documents in the holding module and a predetermined requested number if it is judged that the restriction condition is satisfied, and then adding "the document" as one of the conditions of the comparisons. However, there is no previous mention of any individual selection of a document.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claim 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Simske et al. (US 2004/0064447 A1, *filing date* 9/27/2002) ('Simske') in view of Sekiguchi et al. ('Sekiguchi') (US 2002/0019819 A1, *filing date* 6/22/2001).

With respect to claim 14, Simske teaches:

inputting a search inquiry character train into a first block (paragraph 38);

forming a summary word list including a plurality of words to be searched based on both the search inquiry character train inputted through the inputting step and data having been stored in advance in a database provided within a second block (Figure 3B, paragraph 40);

further inputting a restricting condition for narrowing down search targets for the plurality of words to be searched, the restricting condition being selected from a group consisting including an existence of an indispensable word, and an existence of a taboo word (paragraphs 40, 59, 81 and 89);

receiving and holding a plurality of documents respectively having similarity with the summary word list formed at the forming step (paragraphs 80 and 118, Figure 7);

judging whether or not the restricting condition is satisfied for each document of a plurality of documents respectively including at least one of the plurality of words having been searched within the further inputting step (paragraphs 40, 72, 81 and 89-95);

judging that the restriction condition is satisfied (paragraphs 40, 72, 81 and 89-95);

calculating a similarity score for each document (paragraphs 80 and 135); and
outputting the documents in a descending order of similarity score as the search result (step 712 in Figure 7, paragraph 135).

Simske teaches that a user may input a query, and in response to the user's input, a synonymic search query may be generated. He teaches that the synonymic search query may comprise the input query and at least one synonymic query, and that Boolean operands may be used to construct such a query (paragraph 40). The synonymic search query represents a summary word list, as it includes words based on the search inquiry (input query) and data from a database (synonymic query).

Simske teaches that Boolean expressions may be used to construct queries; more specifically he discloses that **AND** operators may be used (paragraph 72). Therefore, all words joined by the **AND** operator are considered indispensable words because they must all be present in search results. He further teaches that synonyms are not found for proper names, meaning that actual proper name (indispensable word) must appear in the synonymic search query (word list). For example, in paragraphs 89-95, the indispensable word is "Stanford".

In the case where words joined by the **AND** operator represent the restricting condition, all words satisfy the restricting condition. In the case where the proper

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names represent the restricting condition, all queries generated include the proper name, thus all words also satisfy the restricting condition in that case.

Simske does not teach storing documents in a search result candidate holding module; comparing a number of documents stored in the search result candidates holding module and a predetermined requested number if it is judged that the restriction condition is satisfied; in case that a number of documents in the search result candidates holding module number is determined to be smaller than the predetermined requested number N through a comparison at the comparing step, adding the document to the search result candidates holding module; otherwise, calculating similarity score for the document, and comparing a similarity score with the smallest similarity of documents among the documents in the search result candidates holding module; in case the similarity score is larger than the smallest similarity, adding the document to the search result candidates holding module; and outputting the documents added to the search result candidates holding module in a descending order of the similarity score as the search results.

Sekiguchi teaches an information search system (see abstract), in which he teaches:

storing documents in a search result candidate holding module (paragraph 138 lines 1-8);

comparing a number of documents stored in the search result candidates holding module and a predetermined requested number (paragraph 138 lines 1-14) if it is judged that the restriction condition is satisfied (paragraph 137);

in case that a number of documents in the search result candidates holding module number is determined to be smaller than the predetermined requested number N through a comparison at the comparing step, adding the document to the search result candidates holding module (paragraph 138 lines 1-8);

otherwise, calculating similarity score for the document, and comparing a similarity score with the smallest similarity of documents among the documents in the search result candidates holding module (paragraph 138 lines 8-14);

in case the similarity score is larger than the smallest similarity, adding the document to the search result candidates holding module (paragraph 138 lines 18-24);
and

outputting the documents added to the search result candidates holding module in a descending order of the similarity score as the search results (paragraph 145).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Simske by the teaching of Sekiguchi because storing documents in a search result candidate holding module; comparing a number of documents stored in the search result candidates holding module and a predetermined requested number if it is judged that the restriction condition is satisfied; in case that a number of documents in the search result candidates holding module number is determined to be smaller than the predetermined requested number N through a

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comparison at the comparing step, adding the document to the search result candidates holding module; otherwise, calculating similarity score for the document, and comparing a similarity score with the smallest similarity of documents among the documents in the search result candidates holding module; in case the similarity score is larger than the smallest similarity, adding the document to the search result candidates holding module; and outputting the documents added to the search result candidates holding module in a descending order of the similarity score as the search results would enable information on a search object to be obtained even when the user cannot specify a suitable keyword (Sekiguchi, paragraph 6).

With respect to claim 15, Simske teaches:

inputting a search inquiry character train into a first block (paragraph 38);

forming a summary word list including a plurality of words to be searched based on both the search inquiry character train inputted through the inputting step and data having been stored in advance in a database provided within a second block (Figure 3B, paragraph 40);

further inputting a restricting condition for narrowing down search targets for the plurality of words to be searched, the restricting condition being selected from a group consisting including an existence of an indispensable word, and an existence of a taboo word (paragraphs 40, 59, 81 and 89);

receiving and holding a plurality of documents respectively having similarity with the summary word list formed at the forming step (paragraphs 80 and 118, Figure 7);

calculating similarity score for each document of the plurality of documents respectively having similarity with the summary word list formed at the forming step (paragraphs 80 and 135);

judging whether or not the restricting condition is satisfied for each document (paragraphs 40, 72, 81 and 89-95);

in case the document satisfies the restricting condition, adding the document to the search result candidates (paragraphs 79 and 80); and

outputting the documents in a descending order of similarity score as the search result (step 712 in Figure 7, paragraph 135).

Simske does not teach comparing a number of documents in the search result candidates holding module and a predetermined requested number; in case that a number of documents in the search result candidates module is larger than or equal to the requested number, further comparing the similarity score of the document with the smallest similarity of documents among the documents in the search result candidates holding module; in case that a number of documents in the search result candidates module is determined to be smaller than the requested number or the similarity score of the document is larger than the smallest similarity of the candidates through a comparison at the further comparing step, judging whether or not the restricting condition is satisfied for each of the documents for which similarity score was calculated in the similarity score calculating step; in case the document satisfies the restricting condition, adding the document to the search result candidates holding module; and

outputting the documents added to the search result candidates holding means in a descending order of the similarity score as the search results.

Sekiguchi teaches an information search system (see abstract), in which he teaches:

comparing a number of documents in the search result candidates holding module and a predetermined requested number; in case that a number of documents in the search result candidates module is larger than or equal to the requested number, further comparing the similarity score of the document with the smallest similarity of documents among the documents in the search result candidates holding module (paragraph 138 lines 8-24);

in case that a number of documents in the search result candidates module is determined to be smaller than the requested number or the similarity score of the document is larger than the smallest similarity of the candidates through a comparison at the further comparing step, judging whether or not the restricting condition is satisfied for each of the documents for which similarity score was calculated in the similarity score calculating step (paragraph 137, paragraph 138 lines 1-8);

in case the document satisfies the restricting condition, adding the document to the search result candidates holding module (paragraph 138 lines 1-8); and

outputting the documents added to the search result candidates holding means in a descending order of the similarity score as the search results (paragraph 145).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Simske by the teaching of Sekiguchi because the combination would enable information on a search object to be obtained even when the user cannot specify a suitable keyword (Sekiguchi, paragraph 6).

Response to Arguments

6. Applicant's arguments with respect to claims 14 and 15 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia M. Lewis whose telephone number is 571-272-5599. The examiner can normally be reached on Monday - Friday, 9 - 6:30, alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Rones can be reached on 571-272-4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Alicia Lewis
April 21, 2008

/Charles Rones/

Supervisory Patent Examiner, Art Unit 2164